

Preliminary report on a second survey of the insects attacking Salvinia spp. in South America, February to May, 1963. (Unpublished report). 1963.

Second report on the insects collected in association with Salvinia in Brazil during February to May, 1963. (Unpublished report). 1964.

Feeding tests with insects attacking Salvinia auriculata undertaken at Belem during October-December, 1964. (Unpublished report). 1965.

Carbonell, C. S. Habitat, etologia y ontogenia de Paulinia acuminata (DG.) (Acridoidea, Pauliniidae) en el Uruguay. Rev. Soc. Uruguay Ent. 6: 40-48. 1964.

Weatherby, C. A. A Further Note on Salvinia. Amer. Fern Jour. 27(3): 98-102. 1937.

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### MATERIALS TOWARD A MONOGRAPH OF THE GENUS LIPPIA. III

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#### LIPPIA CHEVALIERII Moldenke

Leaves subsessile; leaf-blades chartaceous, often rather thin, bright-green above, grayish-green beneath, oblanceolate, 4--6 cm. long, 1.3--2 cm. wide, acute at the apex, cuneate-attenuate at the base, sharply serrate except at and near the base, the teeth small and rather obtuse, antrorse, rather sparsely strigose above, much more densely so beneath; midrib very slender, usually plane above, prominent beneath; secondaries very slender, 4 or 5 per side, ascending, almost indiscernible above, prominent beneath; vein and veinlet reticulation indiscernible above, rather obscure beneath, flat; inflorescence axillary only, 3--6 per node at the uppermost 2 or 3 nodes, usually shorter than the subtending leaves; peduncles slender, 5--15 mm. long, densely white-pubescent with antrorse hairs; heads oblong, cylindrical, 4--11 mm. long, 5--6 mm. wide, very densely yellow-tomentose, all save the lowest bractlets completely hidden by the yellow tomentum; lowest bractlets ovate, about 3 mm. long and 2 mm. wide, acuminate at the apex, densely tomentose on the back; corolla about 4 mm. long in all, its limb about 2 mm. wide.

The type of this species was collected by August J. B. Chevalier (no. 67) — in whose honor it was named — at Toukoto, Soudan, Mali, on December 28, 1898, and is deposited in the herbarium of the Jardin Botanique de l'Etat at Brussels. Vernacular names recorded for the plant are "bush tea" and "sichelinyamo". In Gambia beehives are smoked with this fragrant herb before being placed up in trees. It is claimed that the fragrance thus imparted to the hives attracts the bees to settle in the hives. Herbarium material has been misidentified and distributed in herbaria under the name L. adonis Hochst.

In all, 11 herbarium specimens, including the type, and 4 mounted photographs have been examined by me.

Citations: MALI: Senegambia: Thierry 227 (K). Soudan: A. Chevalier 67 (Br--type, F--photo of type, N--isotype, N--photo of type, Si--photo of type, Z--photo of type). SENEGAL: Heudelot 103 (K), 107 (N). GAMBIA: Brown-Lester 4 (K, N), 28 (K); Dawe 30 (K); Ingram s.n. (K). REPUBLIC OF GUINEA: Caille 14772 (Br, K).

LIPPIA CHIAPASENSIS Loes., Verh. Bot. Ver. Brand. 53: 78. 1912.

Bibliography: Loes., Verh. Bot. Ver. Brand. 53: 78. 1912; Prain, Ind. Kew. Suppl. 5: 153. 1921; Moldenke, Known Geogr. Distrib. Verbenac., [ed. 1], 17, 20, & 95 (1942) and [ed. 2], 31, 35, & 189. 1949; Moldenke, Alph. List Cit. 3: 689, 919, & 962. 1949; M. C. Carlson, Bull. Torr. Bot. Club 81: 391 & 396. 1954; Moldenke, Résumé 37, 42, & 461. 1959.

Shrub, to 1.5 m. tall; branchlets at first tetragonal, finally terete, rather thick, densely hirtous, the older ones 3--4 mm. in diameter, finally calvescent; principal internodes 1.5--6 cm. long; leaves decussate-opposite, short-petiolate; petioles 4--7 mm. long, rather thick, densely hirtous; leaf-blades dark gray-olivaceous above, very slightly or scarcely lighter beneath, ovate, rigidly chartaceous, 3.5--5.5 cm. long, 1.5--3 cm. wide, acute at the apex, broadly cuneate to rounded at the base and narrowed into the petiole, subserrulate-crenate along the margins, densely strigillose-hirtous with bulbous-based hairs above and roughened, densely hirtous-pubescent beneath; midrib and secondaries conspicuous above, prominent or prominulous beneath; veinlet reticulation dense, impressed above, prominent beneath; inflorescence densely hirtous, the heads ternate or in 4's in the leaf-axils, subglobose, to about 1 cm. wide; peduncles 1.3--2 cm. long, densely hirtous; basal bractlets involucrate, rather thick, ovate-subdeltoid, rather obtusely subacuminate at the apex, sparsely hirtous on the inner and densely hirtous on the outer surface, about 5 mm. long and 3 mm. wide, densely ciliate, subparallel-veined, the remaining bractlets thinner, almost hyaline, much broader, subreniform-cordate, about 5 mm. long and to 6.5 mm. wide, more or less palmately venose, plainly reticulate near the margins, hirtous, ciliate; calyx during anthesis about 2 mm. long, but 3 mm. long in fruit, bifid, very hirsute, one apparently obtuse or rounded, the other bidentate at the apex; corolla yellow or pale-yellow, twice as long as the calyx, about equaling the subtending bractlets, sparsely puberulous at the apex, the tube subequal and narrow, the limb 4-lobed, the anterior lobe scarcely longer than the others; fruit similar to a pear seed, about 2.5 mm. long, 2-seeded, the cocci easily separating.

The type of this species was collected by Georg Edouard and Caecilia Seler (no. 2274) on a hill above Huiztan, in the central district of Chiapas, Mexico, in March, 1891, and was deposited in the herbarium of the Botanisches Museum at Berlin, where it was photographed by Macbride as his type photograph no. 17499, but is now destroyed.